

REMARKS

This Office Action dated 7/18/2003 ("Office Action") was originally made Final. Applicants' Representative expresses appreciation to the Examiner for conducting a telephone interview on 11/04/03. It was my understanding that the Examiner agreed the Office Action was improperly made Final, and the Office Action will therefore be made to "Non-Final". However, in the interview summary form provided via facsimile on 11/04/03, the Examiner indicated that the current response would be entered, but did not indicate the Office Action would be made non-final. Since the Examiner has discretion to enter an amendment after final rejection, this statement does not necessarily indicate the current Office Action is being made non-final. **Therefore, if the current Office Action is not being made Non-Final, prompt clarification is requested.**

Claims 1-28 remain pending in the subject Application. In the Office Action, Claims 1-28 were rejected. Claims 1 and 25 have been amended to correct formality issues only, and the remaining Claims are unchanged. In view of the amendments set forth above, and the comments presented below, it is respectfully submitted the rejections to the Claims have been overcome, and an Early Notice of Allowance is respectfully requested.

1. The Drawings were objected to under 37 CFR 1.83(a) as not showing a "plurality of selectable regions".

Applicants believe the Drawings do illustrate a plurality of selectable regions. For example, each of Figures 2 – 22 illustrates a Graphical User Interface (GUI). (See Applicants' Specification page 6 lines 27-29.) Those skilled in the art will understand that GUI interfaces include such things as windows, pull-down menus, buttons, scroll bars, and iconic images that might be generically described simply as "screen regions". Often such screen regions may be selected by "clicking on", or touching, them with a stylus, a finger, or some other mechanism. This is described throughout Applicants' Specification. For example, one embodiment of the special device is described as

including "...a conventional touch screen and stylus of a palm-held device, which displays graphics and enables function selection by touching various icons and other indicia on the screen." (Applicants' Specification page 6 lines 15-17.)

Although Applicants believe the screen regions are clearly shown in the Drawings and described in the Specification, in the spirit of cooperation, Applicants have amended Claims 1 and 25 to remove any reference to "screen regions". The Claims, as amended, are clearly supported by the Specification. For example, as amended, method Claim 1 includes the following:

"responding to selection of a first of the data objects present in said list to generate a second graphical interface display on said special device of at least a portion of the contents of said first of the data objects together with a display of a plurality of selectable methods, each of said methods executable on said first data object".

Similarly, Claim 25 appears as follows:

"means for responding to selection of a first of the data objects present in said list to generate a second graphical user interface on said special device of at least a portion of the contents of said first of the data objects together with a display of a plurality of selectable methods, each executable on said first data object".

This Claim language is clearly supported by the description in Applicants' Specification. For example, on pages 8 and 9, an aspect of Applicants' invention is described as follows:

"Fig. 5 illustrates a typical result of selecting the "sales" data object. Such selection results in retrieval of the data corresponding to the data object from its storage locations across the network 121 and display of the data on the display of the special device 113....It will be noted that the screen display of Fig. 5 includes a number of user-selectable methods such as "sort," "search" and "compute," which may be invoked on the data." (Applicants' Specification page 8 lines 15-18 and page 9 lines 7-9.)

It should be noted that this amendment is presented in the spirit of cooperation to further prosecution efforts and to address formality issues raised by the Examiner. This amendment is not necessitated by cited prior art, and does not necessitate a new

search. With this amendment to the Claims, it is believed the objection to the Drawings is obviated, and should be withdrawn.

2. The amendment filed on May 12, 2003 was objected to under 35 USC § 112 as introducing new matter. The amendment in question modified the sentence bridging lines 7-9 of page 9 as follows:

It will be noted that the screen display of Fig. 5 includes a number of user-selectable screen areas, or "regions", that correspond to methods such as "sort," "search" and "compute," which may be invoked on the data.

The foregoing amendment added material that was included within the Claims as originally filed. For example, see originally filed Claims 1 and 25 that include selectable screen regions. Such an amendment to the Specification does not introduce new matter, as described in MPEP § 2163.06 as follows:

"...information contained in any one of the specification, claims, or drawings of the application as filed may be added to any other part of the application without introducing new matter."

And also

"The claims as filed in the original specification are part of the disclosure and therefore, if an application as originally filed contains a claim disclosing material not disclosed in the remainder of the specification, the applicant may amend the specification to include the claimed subject matter of an originally filed claim. In re Benno 768 F.2d 1340, 226 USPQ 683 (Fed. Cir. 1985)." (MPEP § 2163.06.)

For the foregoing reason, it is believed the amendment to the Specification was not improper, and did not introduce new matter. However, in the spirit of cooperation, and to further prosecution efforts, this amendment has been canceled above. With the cancellation of this amendment, it is believed this objection should be withdrawn.

3. Claims 1-28 were rejected under 35 USC § 112, first paragraph, as containing subject matter which was not described in the specification in a way as to reasonably convey that one skilled in the art had possession of the claimed invention. In particular, the Examiner states that the limitation "special device" is not adequately described in the Specification.

A telephone interview was conducted November 4, 2003 ("interview") to discuss the foregoing rejection. Applicants' Representative thanks the Examiner for her time in conducting this interview. As discussed in the interview, this rejection was not presented in any previous action. That is, it is a new ground of rejection. Moreover, this rejection was not necessitated by any amendment made by Applicants, nor was it based on an information disclosure filed during the period set forth in 37 CFR 1.97(c). Therefore, this final rejection is improper under MPEP 706.07(a). The Examiner has therefore agreed to withdraw the finality of the current rejection and enter the current amendment. As discussed above, if this understanding is not correct, prompt clarification is requested.

Next, the particulars of the current rejection regarding Applicants' special device are addressed. The Examiner states that the limitation "special device" is not adequately described in the disclosure. Applicants' Specification describes the term "special device" as follows:

"At the same time, data processing and computer capabilities are being built into numerous special devices such as cell phones, palm tops, set tops and car-based GPS computers. Thus, special devices are of a kind whose primary role is not thought of as full scale computing, in contrast to lap-top computers and personal computers." (Page 2 lines 16-20.)

This term is again discussed as follows:

"According to the invention, so-called "special devices" such as palm tops, set tops, cell phones, and car-based GPS computers are provided with the capability to access heterogeneous data stored across the World Wide Web, Internet, or other networks where such networks are treated as a large virtual dataserver or warehouse." (Page 3 lines 2-6.)

A similar discussion may be found within Applicants' Abstract, and on Page 6 lines 18-22 of the Specification. Thus, the term "special devices" is defined within Applicants' Specification. This definition is not repugnant to the generally accepted definition of the term in the relevant art.

Further in regards to this rejection, the Examiner states that the description of a special device on page 6 lines 18-22 and on page 9 lines 16-17 are different. On page 6, the special device is referred to as the "special device hardware input/output interface 113". An amendment to the Specification is presented above to clarify that this terminology is synonymous with "special device 113", which is a term used for brevity within the remainder of the Specification following the initial introductory reference to the "special device hardware input/output interface".

Also on page 6, the term "hardware interface 113" is used. This reference is an oversight, and was derived from the unabbreviated reference to "special device hardware input/output interface 113". This reference has been replaced by "special device 113", thereby making the terminology consistent with that used within the remainder of the Specification.

Turning now to page 9 lines 16-17 of the Specification, the special device is described as a client. This refers to the use of a special device as a client within a client/server model. Such models, which are well known in the art, are described in Applicants' Specification as follows:

"Another method of supplying software 115 to the special device 113 is to have a browser on the special device invoke an ActiveX control from a web page displayed in the browser, which automatically downloads that control from a server. Another approach is to interact with so-called active server pages on a remote server such that all the interpretation and invocation of the "apparatus" is done from the remote server end. This results in a "thin" client, i.e., very little code actually residing on the special device 113. The approach under discussion involves having the agent/messenger processes on the "Client", i.e., the special device 113." (Applicants' Specification page 7 lines 15-22.)

It is respectfully asserted that these aspects of Applicants' invention are clearly described within Applicants' Specification, and are well-known in the art, and the

rejection regarding this reference to the special device as a "client" should be withdrawn.

Next, the Examiner asserts that the reference to the special device in Figure 1 and Figure 23 do not correspond. It is believed that with the change to the Specification discussed above clarifying that "special device hardware input/output interface" is used synonymously with "special device", the Drawings are consistent with the Specification. To even further clarify this point, an amended Figure 1 is submitted that modifies "Special Device Hardware I/O 113" to simply "Special Device 113". In this manner, Figures 1 and 23 use similar terminology, and this rejection should be withdrawn.

Finally, the Examiner states that "a plurality of selectable regions" is not described in the Specification. Although Applicants' Representative respectfully disagrees for the reasons discussed above, this terminology has been removed from the Claims in the spirit of cooperation and to further prosecution. Therefore, this rejection should be withdrawn.

For all of the foregoing reasons, the rejections under 35 USC § 112, first paragraph, should be withdrawn. The Claims are allowable over this rejection as presently presented.

4. Claims 1-12, 25 and 26 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In reference to this rejection, the Examiner states that regarding Claims 1-28, the term "special device" is vague and unclear. (Office Action page 5, second paragraph.) From this statement, it appears that all of Claims 1-28 are being rejected, rather than just Claims 1-12, 25, and 26. If this understanding is incorrect and the rejection is maintained, clarification is requested.

As discussed above, the term "special device" is defined multiple times in a consistent manner throughout Applicants' Specification. Moreover, Applicants' use of this term is not repugnant to the way in which this term is used in the relevant arts. The term usage is even further clarified by the amendments discussed above. In view of the amendments to the Specification and Drawings, and the clear and concise usage of the

term in the Specification, it is respectfully submitted that Claims 1-28 are allowable over this rejection, which should be withdrawn.

5. The application names joint inventors. The Examiner's presumption regarding common ownership of the various Claims is correct.

6. Claims 23, 24, and 26 were rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent No. 5,603,034 to Swanson ("Swanson") in view of U.S. Patent No. 6,169,991 to Tsukahara et al. ("Tsukahara") and U.S. Patent No. 5,414,809 to Hogan et al. This rejection is respectfully traversed. Because the Examiner does not describe in detail in the current Office Action how the system of Swanson teaches or suggests Applicants' invention of Claim 23, Applicants' Representative returns to the Examiner's discussion contained in the Office Action dated 8/16/2002 ("Previous Action") *as best understood*. It is respectfully requested that if any of Examiner's assertions are misinterpreted in any way in this response, the Examiner will provide correction.

Claim 23 includes means for executing a sequence of transactions on data. Each of the transactions of the sequence is based on the result of execution of a previous transaction. At least one of the transactions is executed upon data stored across a plurality of remote storage locations. None of the cited references teach this type of system for the following reasons:

a.) Swanson does not teach means for executing transactions upon data.

Applicants' Specification summarizes the manner in which a transaction is defined to invoke execution of a method on data stored within a data object. During execution of the method, data is manipulated in some manner to produce a result. (See, for example, Applicants' Specification page 3 lines 17-20, page 9 line 6 through page 10 line 22, and page 13 lines 26 through page 17.) The Examiner states that Swanson teaches this limitation by disclosing user selection of resource category

objects, along with a system that is responsive to user activation of the resource category selection object. (Previous Action page 6, last paragraph.)

In the Previous Action, the Examiner correlates the Swanson resource category selection object 920 of Figure 6 to Applicants' first graphical interface display, and the Swanson selectable resource category objects to Applicants' user selection of a data object category. It follows, then, that the resulting display of resource descriptors in the Swanson window 940 of Figure 6 is considered analogous to Applicants' list of data objects available on the system. Therefore, the Swanson resource descriptor is analogous to Applicants' data object. Extending the Examiner's analogy, the selection object 970 appears to be correlated to Applicants' methods, since these fields provide the user with the only selectable mechanism for performing an operation on the Swanson resource descriptor. As previously requested, if Applicants' Representative has misinterpreted any of these correlations, correction is respectfully requested.

Applying the Examiner's analysis set forth above to Applicants' Claim 23, it can be appreciated that any Swanson "method" would correspond to what is provided by screen regions 960 or 970 of Figure 6. For example, a user is allowed to select a new color for the resource descriptor "bottom shadow color" using a so-called "method" which consists of a single screen region 970. This Swanson "method" is no more than a selection mechanism which allows the use to manually select a new value to be stored by the resource descriptor variable "bottom shadow color". This selection mechanism does not invoke any type of transaction, as that term is used in Applicants' Specification. That is, no execution is invoked that transforms or manipulates existing data to produce a result. Therefore, Swanson does not teach or suggest Applicants' "means for executing transactions", as claimed by Applicants' Claim 23. For at least this reason, Swanson does not teach or suggest Applicants' Claim 23.

b.) Swanson does not teach means for executing transactions upon data.

As discussed above, the Examiner is correlating Swanson's resource descriptors with Applicants' data object. The Swanson resource descriptor stores a value that

controls a graphical attribute of a graphical user interface. For example, in Swanson's Figure 7, the resource descriptor "bottom shadow color" is shown to store the value "medium aquamarine". The user can choose to store data indicative of a different color within this resource descriptor. However, there is no teaching or suggestion in Swanson of a mechanism for executing any transaction upon this data. That is, it does not appear there is any mechanism for performing any transaction on the data "medium aquamarine" to achieve some type of result. For this additional reason, Swanson does not teach or suggest Applicants' Claim 23.

c.) Swanson does not teach means for executing a sequence of transactions on data, each of the transactions in the sequence being based on the result of execution of a previous transaction.

Claim 23 claims means for executing a *sequence* of transactions on data. This is described in Applicants' Specification page 9 lines 7-22, wherein an exemplary sequence of transactions includes sorting sales data, searching the sorted data for an order number, and then finally returning the results to the client. At each step in the sequence, the results of the previous transaction are utilized as the basis for executing the next transaction in the sequence. Swanson does not appear to teach, or in any way suggest, this type of sequence of transactions. As noted above, at most, Swanson provides means for allowing a user to select a new value to be stored by a resource descriptor variable. There is no additional operation that may then be performed to modify, or in some way further manipulate, the resulting resource descriptor value. Thus, there is no *sequence* of transactions that may be selected or invoked for execution. For this additional reason, Swanson does not teach or suggest Applicants' Claim 23.

d.) Swanson does not teach means for executing a sequence of transactions on data such that at least one of the transactions is executed on data that is stored across a plurality of remote storage locations.

According to Applicants' invention as claimed in Claim 23, Applicants' data (i.e., data objects) may be distributed across a plurality of nodes. For example, Applicants' Figure 23 illustrates a plurality of nodes 11 through 17. Data may be located in any of these nodes. (Applicants' Specification page 11 lines 22-23.) When a transaction is executed, it is performed on this distributed data such that data on the multiple nodes is manipulated.

In contrast to Applicants' invention, the objects (resource descriptors) of Swanson are included within a single client application on a single system. Specifically, the Swanson resource editor is used to update the objects (resource descriptors) of an application (Swanson column 6 lines 56-58). This application, which is shown as application 110 of Figure 1, may be "...located at a remote platform, or within the data processing system 10..." (Swanson column 5 lines 50-51.) Thus it follows that the application's objects are also located either on the remote platform or on the data processing system 10. There is no teaching or suggestion what-so-ever within Swanson that the Swanson application, or any of the objects, is distributed across a plurality of remote storage locations.

For at least the foregoing reasons, Swanson does not teach or suggest Applicants' Claim 23. Moreover, neither Tsukahara nor Hogan appears to add anything to Swanson to teach or suggest the above-described features of Applicants' Claim 23. Therefore, this rejection should be withdrawn.

e.) There is no motivation to make the cited combination of references.

Claim 23 further includes the aspects of having a display screen providing point and touch interaction. The Examiner agrees that Swanson does not teach this type of interaction, but states that these aspects are taught by Tsukahara, which describes a client device with a display screen, and Hogan, which discloses a touch screen.

Hogan describes a computer-based graphics interface for graphically illustrating data that has been retrieved from a database system. (See, for example, Hogan

column 3 lines 5–7.) Although Hogan describes one embodiment of a graphical user interface, it does not appear that Hogan describes any type of general-purpose editor for editing such an interface. Thus, Swanson and Hogan are targeted at solving completely different problems.

Next, Tsukahara is considered. Tsukahara describes a client server system that can be coupled to multiple client machine devices. Each client machine device executes a database data generation task and a database data processing task which each corresponds to a different function. When a workload concentration state exists in a first client machine device, another client machine device is caused to execute the function that originally was the responsibility of the first device. (Tsukahara Abstract and column 3.)

Applicants' Representative respectfully maintains that there is no motivation to combine any teachings of the Tsukahara client/server system with the resource editor of Swanson, or the graphics interface of Hogan. All three references solve entirely different problems in entirely different ways. For at least this additional reason, this rejection is improper and should be withdrawn.

Claim 24 depends from Claim 23, and is allowable over this rejection for at least the reasons discussed above in regards to Claim 23.

Claim 26 depends from Claim 24, and is allowable over this rejection for at least the reasons discussed above in reference to Claim 24.

For at least the foregoing reasons, Claims 23, 24, and 26 are allowable over the current rejection, which is improper, and should be withdrawn.

7. The responses to Applicants' arguments are appreciated. Further, Applicants' Representative appreciates the Examiner's time in conducting the telephone interview of 11/04/03 to discuss the various rejections and objections of the Office Action. The above-described amendments and arguments address all objections and rejections raised in the current Office Action, and it is believed the Claims are in condition for allowance as presently presented.

8. The prior art made of record and not relied upon has been reviewed and is considered to be of general interest only.

Conclusion

Claims 1-28 remain pending in the subject Application. In the Office Action, Claims 1-28 were rejected. Claims 1 and 25 have been amended to correct formality issues only, and the remaining Claims are unchanged. In view of the amendments and arguments set forth above, it is respectfully submitted the rejections to the Claims have been overcome, and an Early Notice of Allowance is respectfully requested. If the Examiner has questions or concerns about this correspondence, a call to the undersigned is encouraged and welcomed.

Respectfully submitted,

I hereby certify that this correspondence is being deposited in the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, P O Box 1450, Alexandria, VA 22313-1450 on November 6, 2003.

Beth L. McMahon 11/6/2003
Beth L. McMahon
Attorney for Applicants
Reg. No. 41,987
Tele No. (651) 635-7893

Beth L. McMahon
Attorney for Applicants
Beth L. McMahon
Signature
November 6, 2003

Unisys Corporation
M.S. 4773
P.O. Box 64942
St. Paul, MN 55164-0942